Ms Rosario Marin, Chair California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, CA 95833

Express Terms for Proposed Building Standards of the Office of the State Fire

Marshal (OSFM)

Regarding the 2007 California Fire Code, California Code of Regulations, Title

24, Part 9

Dear Ms Marin:

The California Fire Chiefs' Association, Fire Prevention Officers' Section opposes the proposed regulatory action by the Office of the State Fire Marshal (OSFM) regarding the Group "L" Occupancies. Our concerns are based on scoping and technical issues as noted below.

#### **Scope**

The Notice of Proposed Action provided a summary of Health and Safety Code, Section 13143.9 that was to provide statutory authority for the proposed action. The summary omitted the charging and limiting statement that is the basis of this concern. The following is the actual text of Health and Safety Code Section 13143.9 (a). The omitted text has been underlined for emphasis:

13143.9. (a) The State Fire Marshal shall, in carrying out Section 13143, prepare, adopt, and submit building standards and other fire and life safety regulations for approval pursuant to Chapter 4 (commencing with Section 18935) of Part 2.5 of Division 13 establishing minimum requirements for the storage, handling, and use of hazardous materials, as defined, in Article 9 of the 1988 Uniform Fire Code, and any subsequent editions, published by the Western Fire Chiefs Association and the International Conference of Building Officials. The State Fire Marshal shall seek the advice of the

Office of Emergency Services in establishing these requirements. This section does not prohibit a city, county, or district from adopting an ordinance, resolution, or regulation imposing stricter or more stringent requirements than a standard adopted pursuant to this section.

The OSFM's authority to write regulations addressing the storage, handling, and use of hazardous materials, is limited by the first sentence that references Section 13143. Section 13143 provides the OSFM with regulatory authority over several building uses that would translate into occupancy groups "A", "E", and "I".

This interpretation of Section 13143.9 would be consistent with the scope of the original set of regulations developed by the OSFM, then referred to as H-8 occupancies.

Review of the Express Terms submitted by the OSFM, notes that none of the proposed changes addressing Group "L" Occupancies cite section 13143.9 as providing authority or reference. As such, the OSFM has exceeded the parameters of the Building Standards Commissions "nine-point criteria" which states:

"The proposed building standard is within the parameters of enabling legislation."

The Group "L" Occupancy proposals in the Express Terms published and distributed by the OSFM do not cite any statute that would permit these regulations to be applicable beyond those uses specified in Section 13143.

The data provided by the OSFM does not substantiate compliance with criterion 7 of the Building Standards Commission's "nine-point criteria" which states:

"Applicable national specifications, published standards, and model codes have been incorporated. If not, the State agency must define the inadequacies or nonexistence of a national specification, standard, or model code."

The originally developed H-8 regulations addressed a concern by the University of California that the model code, in effect at that time, limited the use, handling, and storage of hazardous materials to the lower floors of buildings, thus creating a problem for the existing teaching laboratories on University of California campuses. The originally developed regulations addressed those concerns. The currently adopted model code is more liberal than the originally developed regulations. Justification should be submitted by the OSFM for not incorporating the nationally recognized standards found in the International Fire Code

# **Scoping Summary**

The need for these requirements is unclear. The inferred inadequacy of the International Codes is not addressed (criterion 7). The OSFM has not demonstrated how reducing the level of safety in these buildings from what has existed (outside the University community) for many years is; necessary (criterion 6), and in the public interest (criterion 3) of the BSC nine-point criteria.

### **Technical Issues by Section**

<u>Sec 443.1</u> <u>Definition of Laboratory Suite</u>. A laboratory suite can include more than one laboratory [one-hour fire barrier is not required between individual laboratories].

<u>Sec 443.2.3</u> <u>Laboratory suite requirements.</u> One laboratory suite can include multiple-tenants, and extend throughout a single floor.

<u>Sec 443.4.6.1 Required systems</u>. Treatment systems for highly toxic materials are not included in the list, whereas the International Fire Code, in Sections 2704.7 and 2705.1.5 require emergency power to be provided for treatment systems.

Exhaust ventilation in laboratory suites is allowed to be re-circulated. Laboratory suites can include many laboratory rooms and can include several separate tenant spaces. This may, in many circumstances, be in conflict with the

Mechanical Code requiring exhaust containing flammable vapors [at or more than 25% LFL] to discharge directly to the outside of a building.

Mechanical ventilation systems on emergency power. This is a significant change in the mechanical exhaust requirements during an actual emergency. A non-fire emergency may evolve into a fire emergency. Additionally, reducing the exhaust ventilation during an emergency may result in a conflict with the mechanical code where the exhaust ventilation maintains the vapors at 25% LFL or less and the ducts extend directly to the outside.

<u>Travel distance within L Occupancies.</u> The travel distance is within a room, whereas, in the last "L" Occupancy re-write this section was in reference to travel distances to an exit. See also Table 1016.1.

<u>Table 503</u> Except for Type VB Construction, the allowable areas for the given types of construction have been significantly increased since the last re-write of the "L" Occupancy Sections. Allowable heights have been significantly increased as well. Therefore, despite the SFM limit on "double dip", what would typically be treated as an H-2 or an H-3 [unlimited quantities of flammable and combustible liquids in use or storage per floor] is allowed significantly larger square footages and heights.

<u>Sec 504.2 Automatic sprinkler system increase</u>. In a sprinklered building, Groups H-1, H-2, H-3, or H-5 Occupancies are not allowed the 20 foot increase in height, though Group "L" Occupancies are, despite having similar hazards.

<u>Separation</u>. Non-separated use is not allowed for "L" Occupancies. However one-hour fire barriers are required between suites. This does not provide any additional protection/ restrictions.

<u>Table 1016.1</u> Exit access travel distance. This is a significant change from the previous re-writes of "L" Occupancies. A 150 feet travel distance allowed within an individual suite versus 100 feet travel distance to an exit [see section 443.6.2] is allowed. Also, the exit access travel distance has significantly changed from 100 feet to 300 feet. The requirements in the last version of the "L" Occupancy re-write were similar to that of an "H" Occupancy but are changed to that of a "B" Occupancy, not an H-2, H-3, or H-4 [old H-7] Occupancy.

<u>Table 1017.1</u> Corridor fire-resistance rating. The requirements for fire-resistive ratings for corridors contained within the last re-write for "L" Occupancies was comparable to H-2 Occupancies, but not similar to an H-4 [H-7 Occupancies, exceeding MAQs or Exempt Amounts for Health Hazards]. This only reduces the requirements for smaller laboratory suites serving occupant loads of 30 or less. Given that the occupant loads for laboratory suites is one occupant per 200 square feet gross, the significance of this change is only applied to laboratory suites of 600 sq. ft. or less.

<u>Tables 1016.1 and Table1071.1.</u> Only an ordinary hazard fire sprinkler system is required despite the quantities of materials present, e.g., flammable liquids that would otherwise require the protection of a higher density sprinkler system.

# **Technical Summary:**

The proposed regulations will permit unlimited quantities of hazardous materials in Group L type occupancies.

Buildings housing Group L Occupancies may contain materials presenting physical and health hazards; however, they are permitted to be constructed with larger heights and areas, and with less fire resistance and controls than buildings housing the former Group H, Division 8

Occupancies. The former H-8 regulations were written to closely parallel the old Group H, Division 7 occupancy regulations (H-4 in currently adopted codes) addressing materials presenting only health hazards.

The regulations proposed create additional risks without commensurate mitigation of the associated physical hazards.

# Conclusion

The California Fire Chiefs' Association, Fire Prevention Officers' Section, respectfully requests that the Building Standards Commission <u>disapprove</u> the proposed Group L Occupancy regulations. We base this request upon 1) the apparently inappropriate legislative authority cited as the basis for the scope of these regulations, and 2) the discrepancies in code requirements between the "L" and the "H" type occupancies that will create safety issues for public and emergency personnel alike. We would welcome the opportunity to work collaboratively with the OSFM and other appropriate stakeholders to continue the development of these regulations for future adoption.

Sincerely,	
Morgana Yahnke, President	Ken Kraus, President
California Fire Chiefs' Association, Fire Prevention Officers Section, Northern Division	California Fire Chiefs' Association Fire Prevention Officers' Section Southern Division